

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A thin coating film on a substrate, said thin coating film having a thickness ~~of not~~ of not more than $0.5\mu\text{m}$ and consisting essentially of a continuous layer of fluorine-containing polymer formed by adhering directly to a substrate, said fluorine-containing polymer in the coating film having a hydrophilic functional group and a crystalline melting point of said fluorine-containing polymer being not less than 200°C .
2. (canceled).
3. (canceled).
4. (previously presented): The thin coating film of Claim 1, wherein the crystalline melting point of the fluorine-containing polymer in the coating film is not less than 300°C .
5. (previously presented): The thin coating film of Claim 1, wherein the hydrophilic functional group is at least one of hydroxyl, carboxyl, salt of carboxylic acid, sulfonic acid group or salt of sulfonic acid.
6. (previously presented): The thin coating film of Claim 1, wherein the fluorine-containing polymer having a hydrophilic functional group is a fluorine-containing polymer prepared by copolymerizing (a) 0.05 to 50% by mole of at least one of ethylenic monomers having any functional group selected from hydroxyl, carboxyl, salt of carboxylic acid, sulfonic

acid group or salt of sulfonic acid with (b) 50 to 99.95% by mole of fluorine-containing ethylenic monomer which does not have said functional group.

7. (original): The thin coating film of Claim 6, wherein the ethylenic monomer (a) having functional group is at least one of fluorine-containing ethylenic monomers having any functional group selected from hydroxyl, carboxyl, salt of carboxylic acid, sulfonic acid group and salt of sulfonic acid.

8. (canceled).

9. (previously presented): A method of forming the thin coating film of Claim 1, which comprises coating an aqueous dispersion on a substrate and sintering at a temperature of not less than a crystalline melting point of the fluorine-containing polymer contained therein, wherein the aqueous dispersion comprises 0.1 to 70% by weight of fluorine-containing polymer having a hydrophobic functional group in the form of fine particles having a particle size of 1 to 200 nm and 30 to 99.9% by weight of water.

10. (previously presented): A thin coating film on a substrate, said thin coating film having a total thickness of less than 3 μm and comprising at least two layers of a layer of (A) a fluorine-containing polymer having hydrophilic functional group and a layer of (B) a fluorine-containing polymer having no functional group, where the layer of (A) is between the substrate and the layer of (B).

11. (previously presented): The thin coating film of Claim 10, wherein a thickness of the layer of the fluorine-containing polymer having hydrophilic functional group (A) is not more than 2 μm .

12. (previously presented): The thin coating film of Claim 10, wherein the fluorine-containing polymer having hydrophilic functional group (A) consists essentially of a continuous layer of fluorine-containing polymer formed by adhering directly to a substrate.

13. (previously presented): The thin coating film of Claim 10, wherein the fluorine-containing polymer having hydrophilic functional group (A) has a crystalline melting point of not less than 200°C.

14. (previously presented): The thin coating film of Claim 10, wherein the fluorine-containing polymer having hydrophilic functional group (A) has a crystalline melting point of not less than 300°C.

15. (previously presented): The thin coating film of Claim 10, wherein the hydrophilic functional group of the polymer (A) is at least one of hydroxyl, carboxyl, salt of carboxylic acid, sulfonic acid group or salt of sulfonic acid.

16. (previously presented): The thin coating film of Claim 10, wherein the fluorine-containing polymer having hydrophilic functional group (A) is a fluorine-containing polymer prepared by copolymerizing (a) 0.05 to 50 % by mole of at least one of ethylenic monomers having any functional group selected from hydroxyl, carboxyl, salt of carboxylic acid, sulfonic acid group or salt of sulfonic acid with (b) 50 to 99.95 % by mole of fluorine-containing ethylenic monomer which does not have said functional group.

17. (previously presented): The thin coating film of Claim 16, wherein the ethylenic monomer (a) having functional group is at least one of fluorine-containing ethylenic monomers

having any functional group selected from hydroxyl, carboxyl, salt of carboxylic acid, sulfonic acid group or salt of sulfonic acid.